

# WELCOME

Experiential Learning and the Changing Face of Early Childhood Education





Dr. Sarah K. Gandrucko  
**ACADEMY**  
FOR EARLY LEARNERS

- Mansfield, Texas / Mansfield ISD
- Pre-kindergarten (3-4 year olds)
- 53,340 sf
- 325 students
- \$16 million
- Completed in December 2018





# KEY

- 1 Main Entrance
- 2 Outdoor Learning
- 3 Outdoor Play
- 4 Hard Surface Play
- 5 Detention Pond

0 100



# THE RESEARCH





Prior knowledge creates a scaffolding for information.

Donna Recht and  
Lauren Leslie  
The Baseball Study

Quality early childhood education provides an economic return to society at a rate of seven to ten percent per year.

Dr. James Heckman  
Nobel Laureate in Economics

## THE CORE STORY OF CHILD DEVELOPMENT

The Council has worked in partnership with the FrameWorks Institute to simplify highly complex scientific concepts about child development into a *core story* that reflects a sophisticated understanding of the developmental process, yet is still understandable to lay audiences. The original concepts of the story follow below:

- **Early experiences in life build “brain architecture,”** with simple circuits forming first and more complex circuits building upon them.
- **Children develop in an environment of relationships** that begins in the family but also involves other adult caregivers. The developmental process is fueled by a reciprocal, “serve and return” process, in which young children naturally reach out for interaction and adults respond—and vice versa.
- **Genes and environments interact to shape the architecture of the brain.** Genes provide the basic instructions, but experiences leave a chemical “signature” authorizing how and even whether the instructions are carried out.
- **Cognitive, emotional, and social capacities are inextricably intertwined,** and learning, behavior, and both physical and mental health are highly interrelated over the life course. We can’t have one without the other.
- **“Toxic stress” derails healthy child development** and can have long-term negative effects on learning, behavior, and physical and mental health.
- **Brain plasticity and the ability to change behavior decrease**

## Reaching for Breakthroughs with Science-Based Innovation

Science    Innovation & Application    Collective Change



Innovation does not happen in a vacuum. To bring about lasting, population-level change for children facing adversity, we must foster a movement of collective change.

[Review Key Concepts | Learn Communities in Action](#)

[Learn more about Collective Change >](#)

## The Importance of Early Learning

In 1960, only 10 percent of the United States’ 3- and 4-year olds were enrolled in a school program. Today, nearly 75 percent of 4-year-olds and 51 percent of 3-year-olds are enrolled in private or public pre-kindergarten programs. But just being in a program may not be enough; studies have shown that children who participate in high-quality early childhood programs outperform students who do not.

$E=mc^2$



## Benefits of early education

The quality of a pre-k program, or lack of, sets the stage for a student’s future. Programs can improve cognitive development, and reading and math scores. A quality pre-k program can help students:



Reduce grade repetition among first graders by 30 percent after one year of enrollment and 50 percent after two years.



Display more self-confidence and positive behavior in the classroom.



Graduate from high school and go on to college.



Have an immediate effect of a 7 to 8 point increase on an IQ test, or moving from the 30th to 50th percentile for achievement test scores.



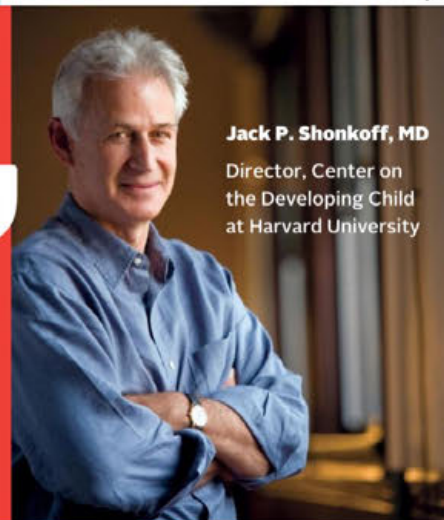
Move through k-12 without supplementary or remedial education, saving school districts about \$3,700 per child.



Earn more money as an adult.

For us, the issue is not so much, ‘what’s the best available knowledge,’ but ‘how do we take the best of what we’re doing right now and say, in a constructive way, **it’s not good enough.**’

Our mission is to create an R&D platform for a field that hasn’t made it safe to try new things... **We’re driven by an incredible sense of urgency.**



**Jack P. Shonkoff, MD**  
Director, Center on the Developing Child at Harvard University

research has shown that the number of programs meeting these benchmarks has improved year over year. Take a look at the percent increase over the past decade.



Percentages of children in special education and teachers with a BA or higher. Percentages of specialized teachers, assistant teachers, and learners with an evidence-based program. Percentages of learners with a high-quality early learning experience.

30,000,000 WORD

BILL & MELINDA GATES foundation

bezosfamilyfoundation



# **“THE BASEBALL STUDY”**

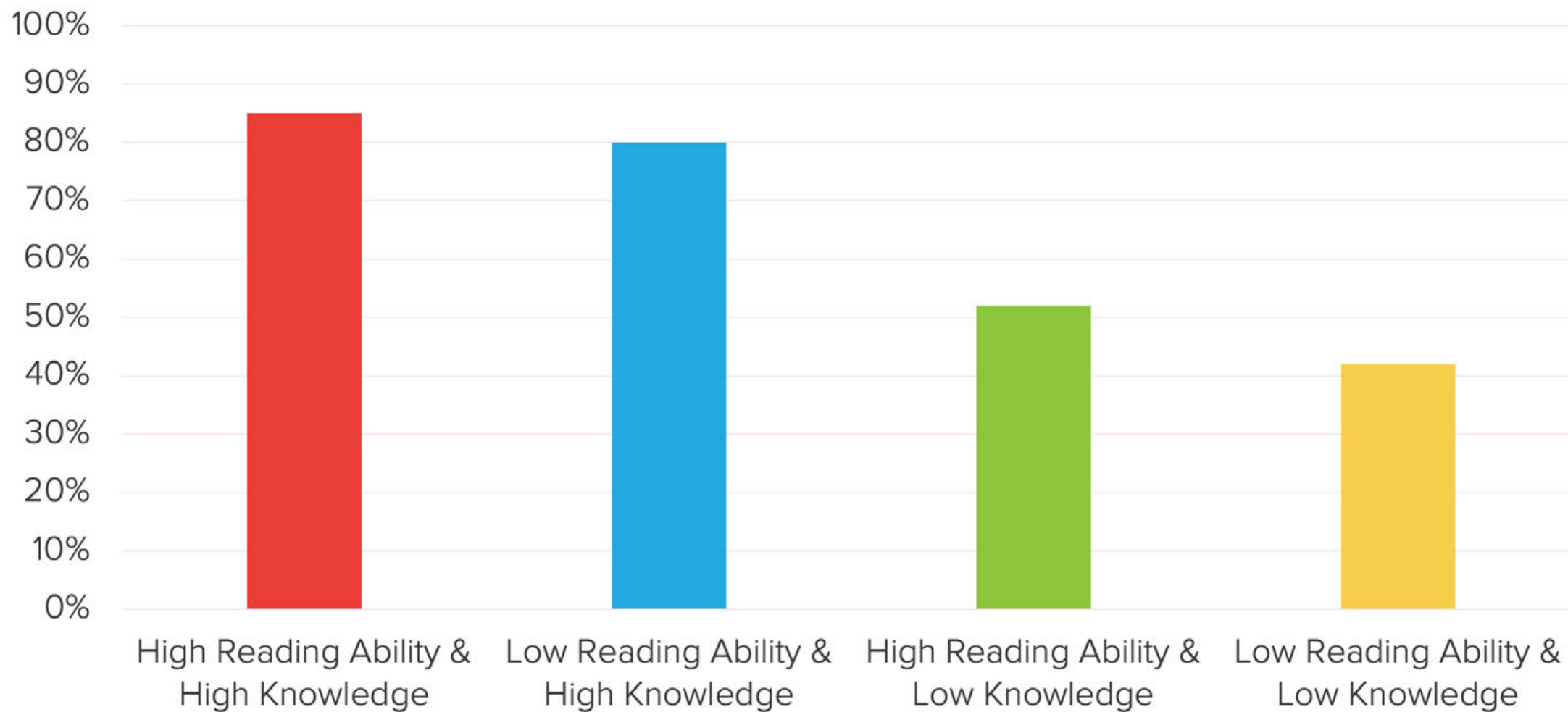


# DR. SARAH K. JANDRUCKO ACADEMY FOR EARLY LEARNERS

READING ABILITY	High Reading Ability Low Knowledge of Baseball	High Reading Ability High Knowledge of Baseball
	Low Reading Ability Low Knowledge of Baseball	Low Reading Ability High Knowledge of Baseball
		KNOWLEDGE OF BASEBALL

Reading  
Ability  
High:  $\geq 70\%$   
Low:  $\leq 30\%$

# DR. SARAH K. JANDRUCKO ACADEMY FOR EARLY LEARNERS





# **CURRICULUM + EXPERIENCE**



# CONCEPTUAL PACKAGING



CURRICULUM + EXPERIENCE



# CONCEPTUAL PACKAGING



V.E.3—Child begins to **RECOGNIZE AND CREATE PATTERNS.**



V.A 1—Child knows that objects or parts of an object **CAN BE COUNTED**



III.B.4—Child **BLENDS SYLLABLES** into words  
III.B.8—Child **BLENDS ONSET CONSONANT AND RIME** to form a familiar one syllable word with and without pictorial support

For us, the issue is not so much, ‘what’s the best available knowledge,’ but ‘how do we take the best of what we’re doing right now and say, in a constructive way, **it’s not good enough.**’

Our mission is to create an R&D platform for a field that hasn’t made it safe to try new things . . .  
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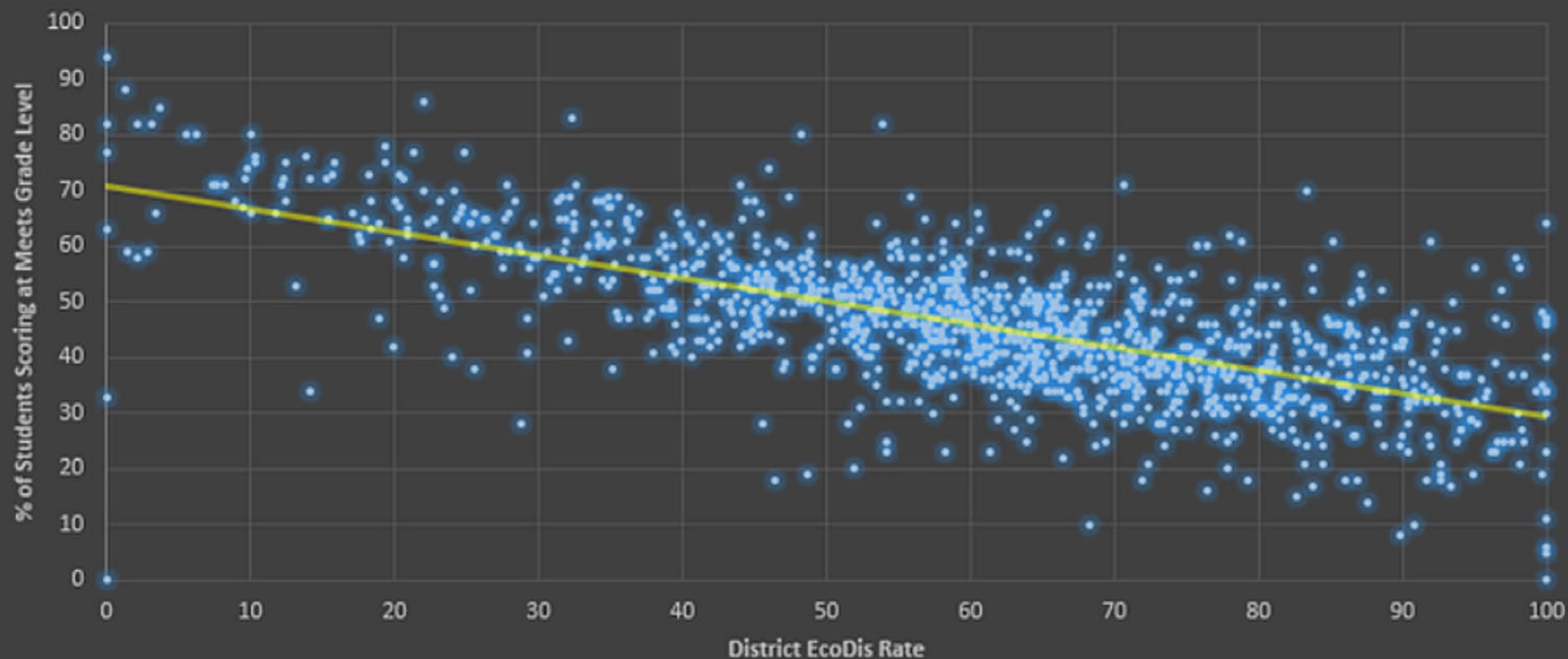
**Jack P. Shonkoff, MD**

Director, Center on  
the Developing Child  
at Harvard University



# STAAR Meets Grade Level vs. EcoDis Rate *All Districts*

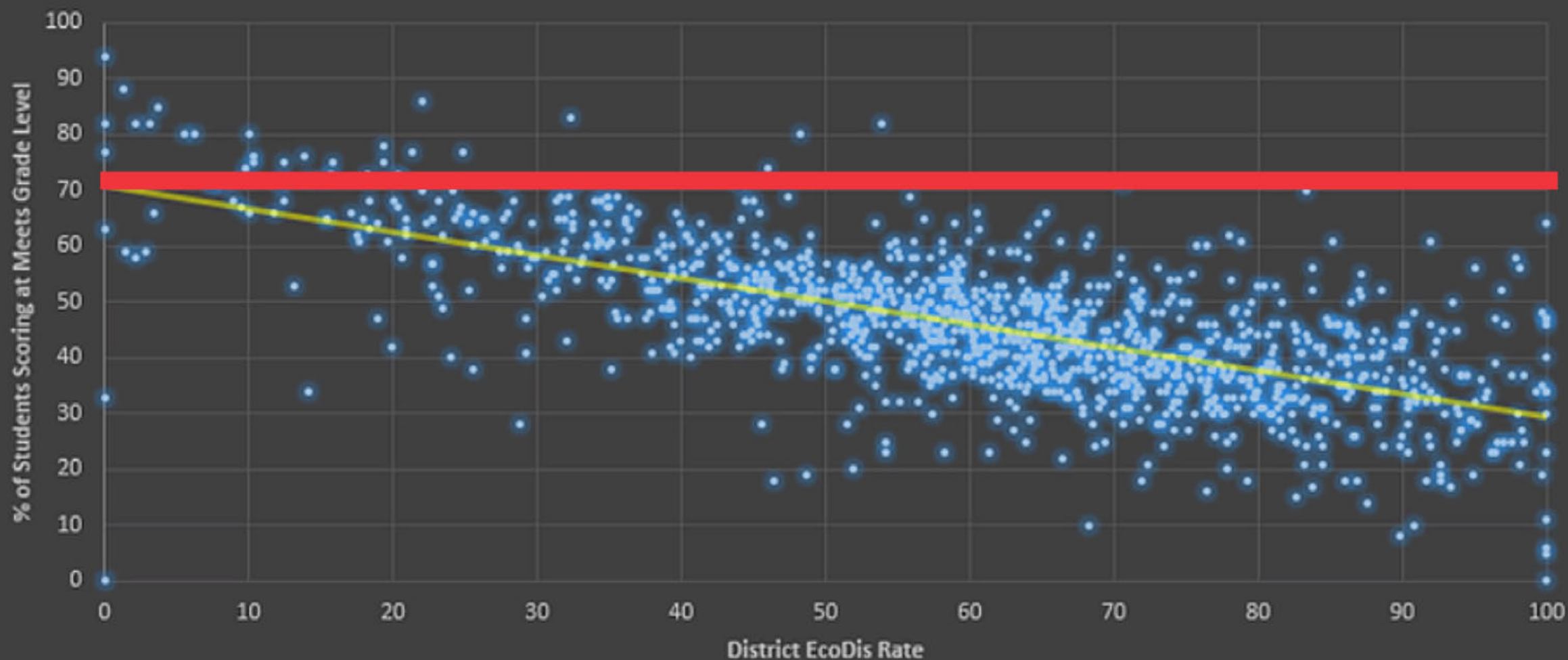
$R^2 = 0.4731$



**ARE YOU OKAY WITH THIS?**

# STAAR Meets Grade Level vs. EcoDis Rate *All Districts*

$R^2 = 0.4731$



**WE CAN DO THIS DIFFERENTLY!**



# LEARNING ENVIRONMENT





**It's not more of the same...**

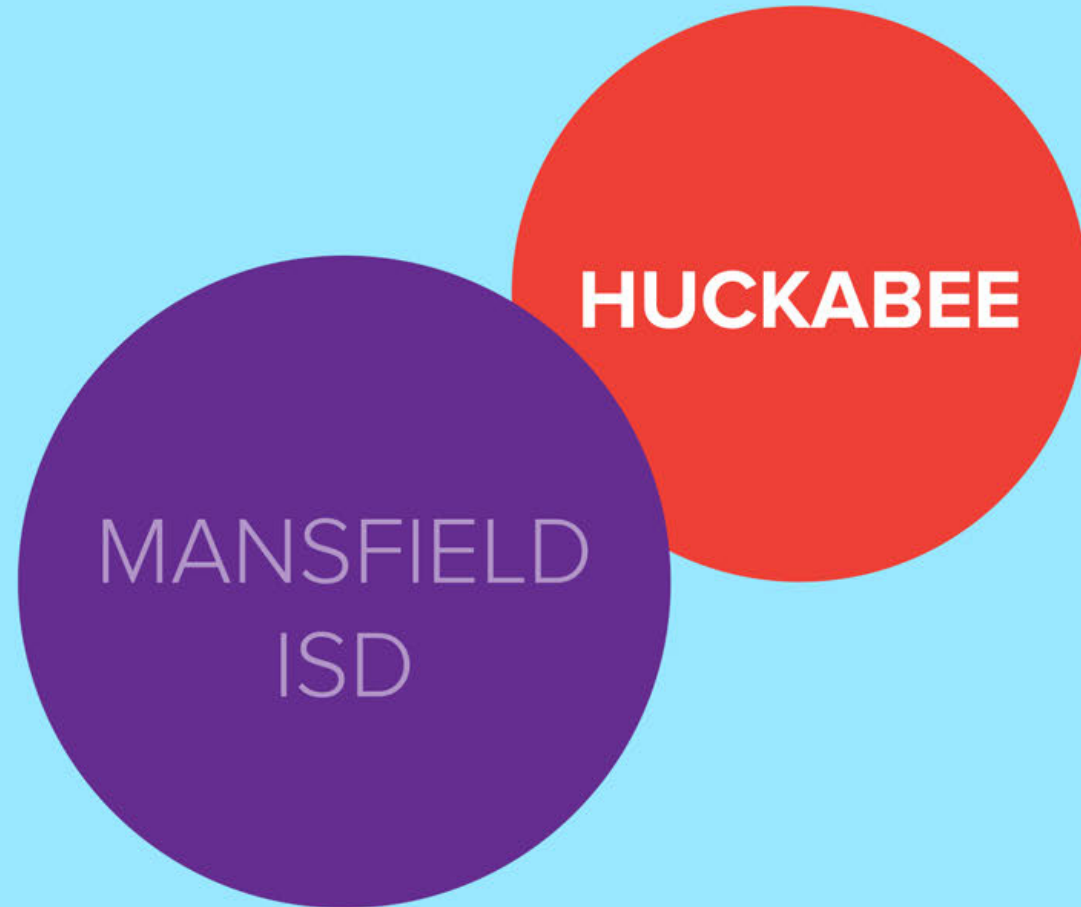
**Every space that the child  
encounters supports curriculum,  
experience and their  
social / emotional wellbeing.**

**BE INTENTIONAL!**



The logo consists of a solid purple circle on the left side of a light blue background. Inside the circle, the words "MANSFIELD" and "ISD" are written in white, bold, sans-serif capital letters, stacked vertically.

**MANSFIELD**  
**ISD**









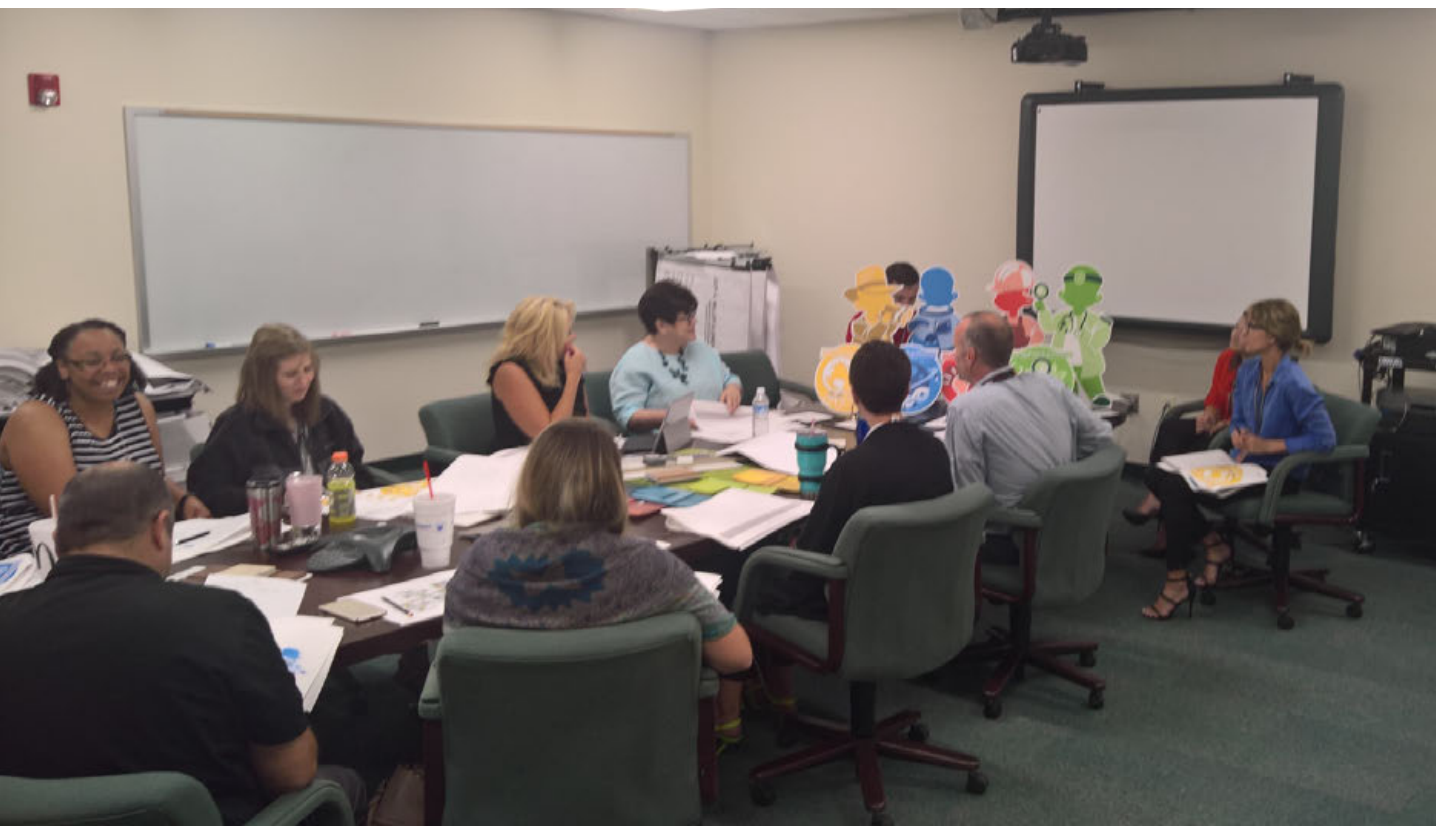
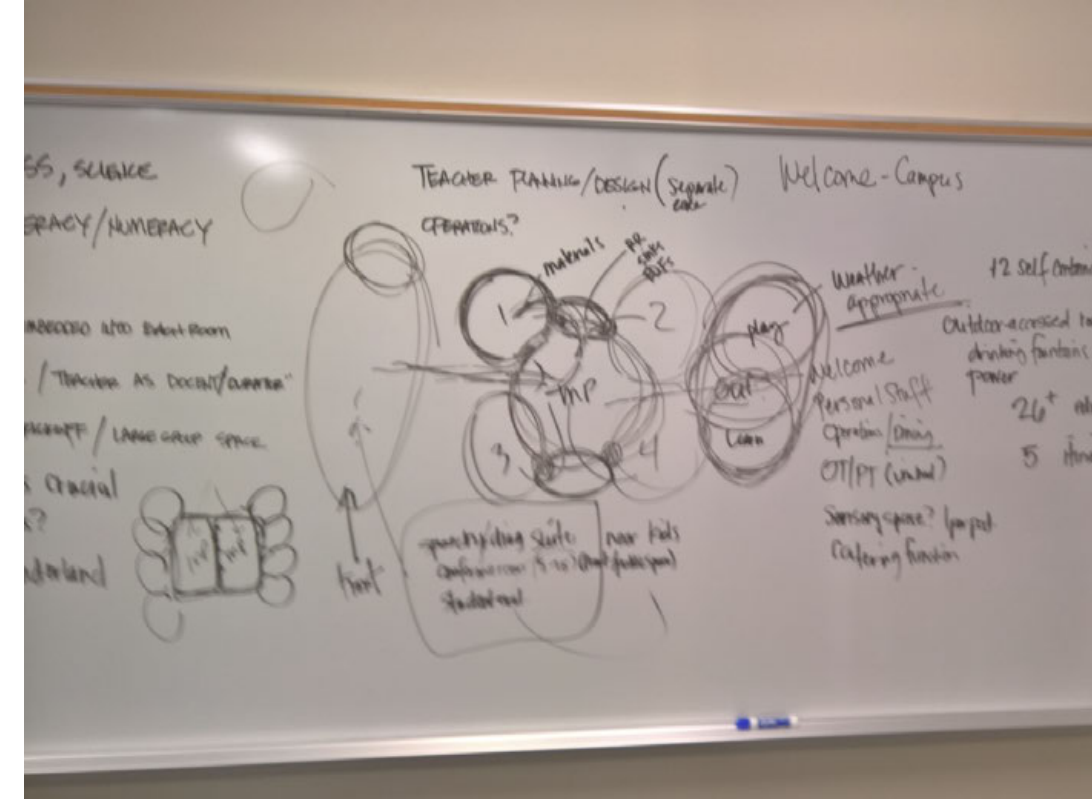
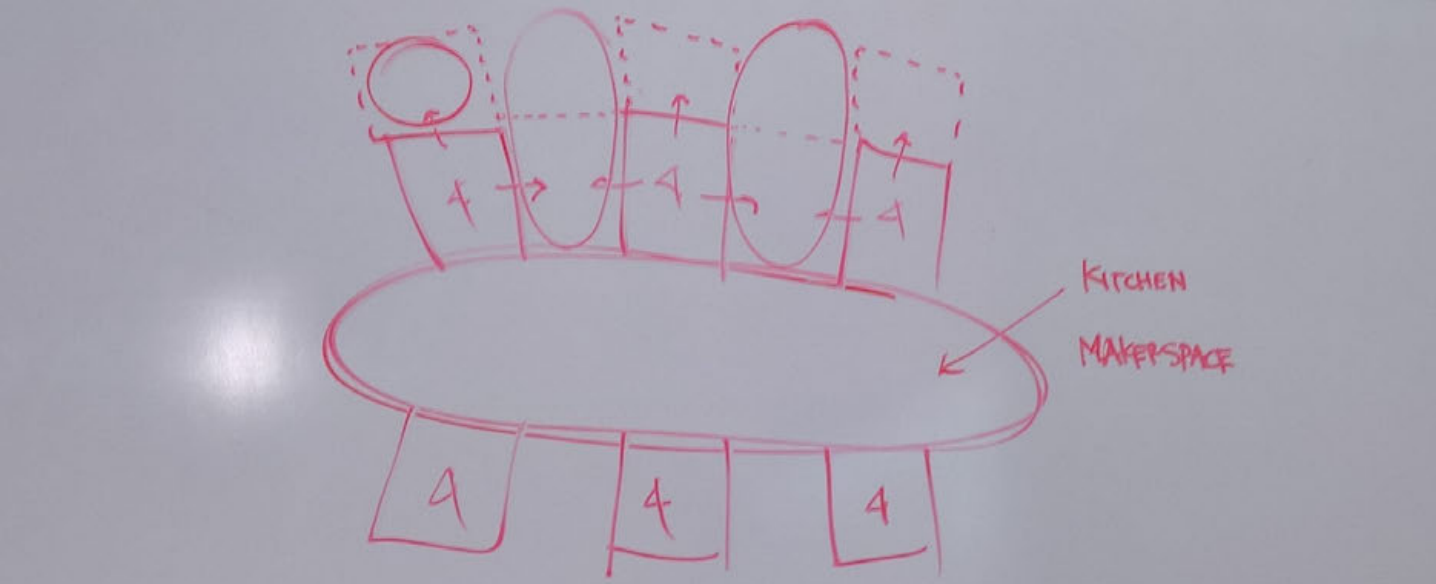


**We have to do this well.**



**WE NEED TO  
GO ALL IN!**





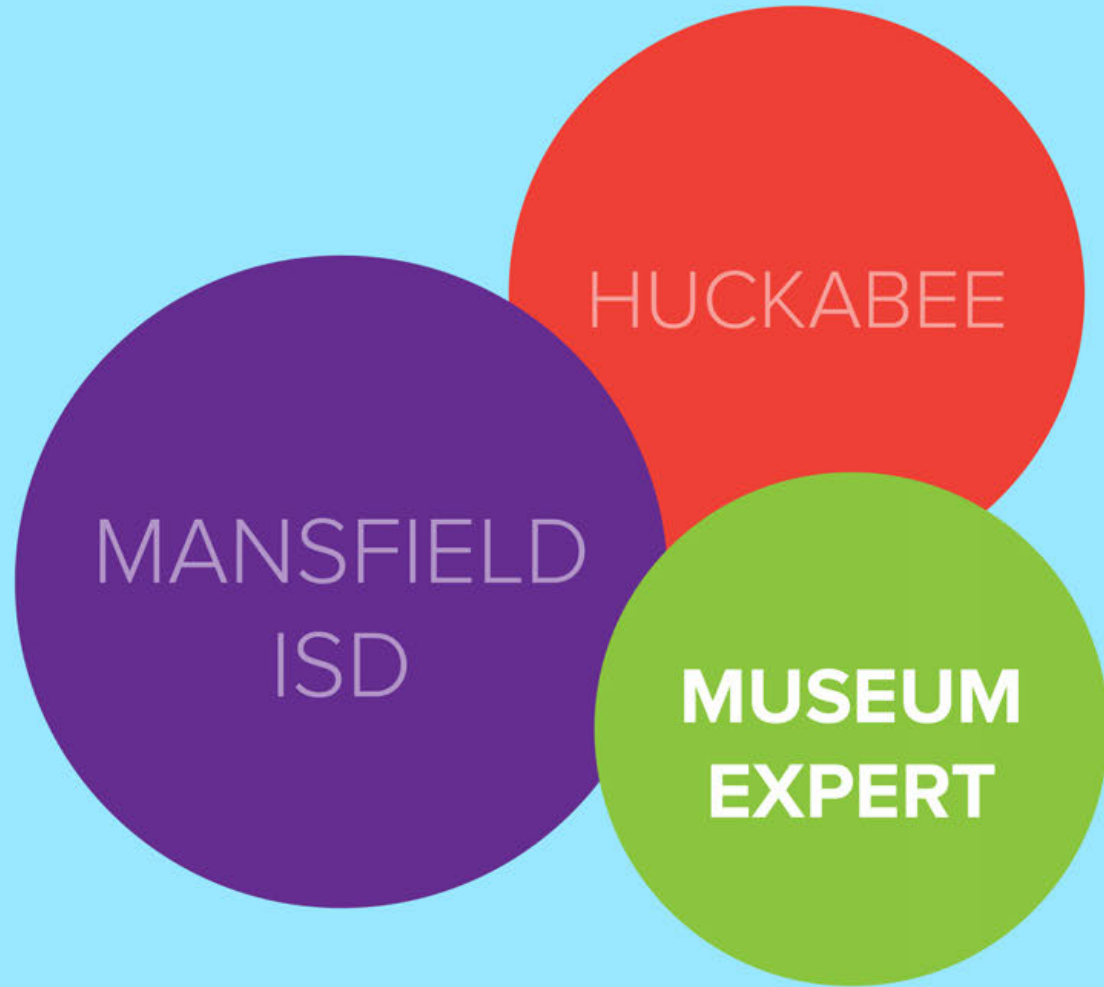


It can't just be about the classroom...

**It has to be an experience!**

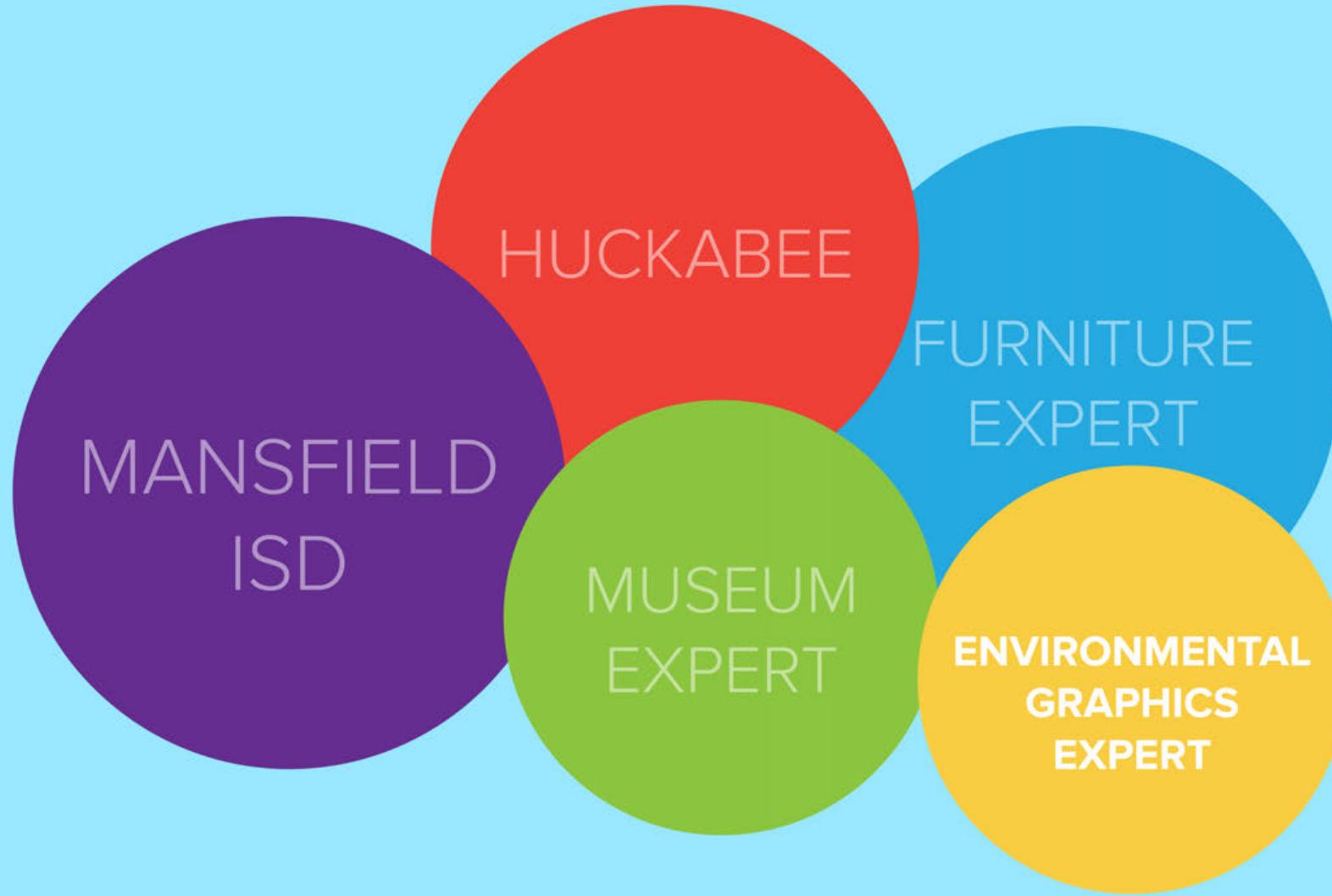
**It has to support the goal of  
early learning!**

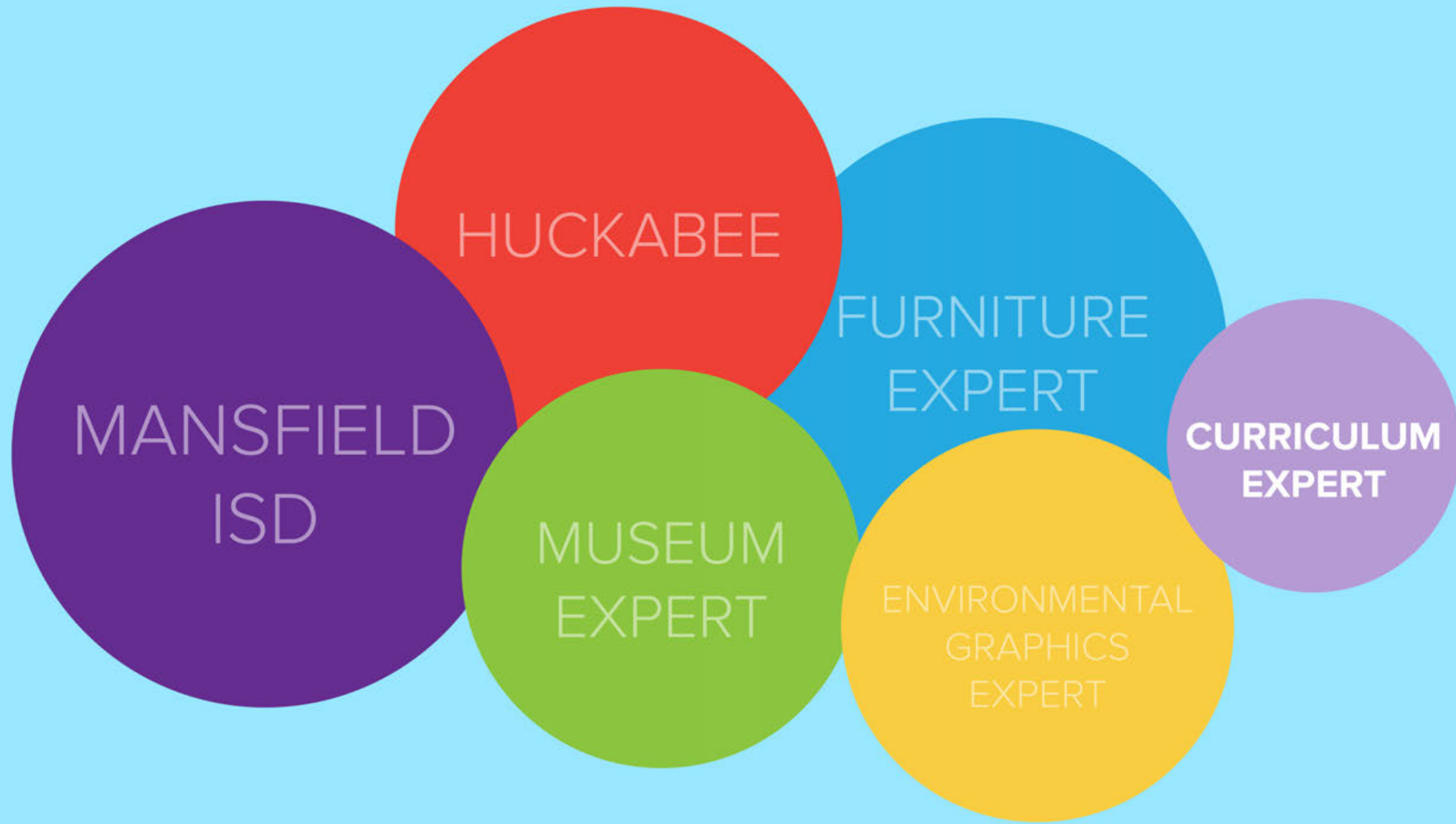














**The Dream Team**



# PODS + LEARNING EXPERIENCES

## *Navigation*

- Space
- Wonderland
- Let's Get Going
- Journey in Time

## *Interaction*

- Our World
- Savvy's Market
- Community
- Construction

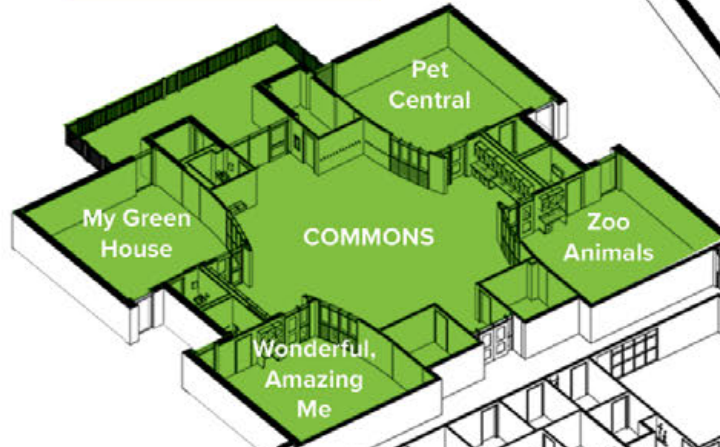
## *Investigation*

- Zoo
- Pet Central
- My Green House
- Wonderful, Amazing Me

## *Exploration*

- Tropics
- Savanna
- Ocean
- Polar

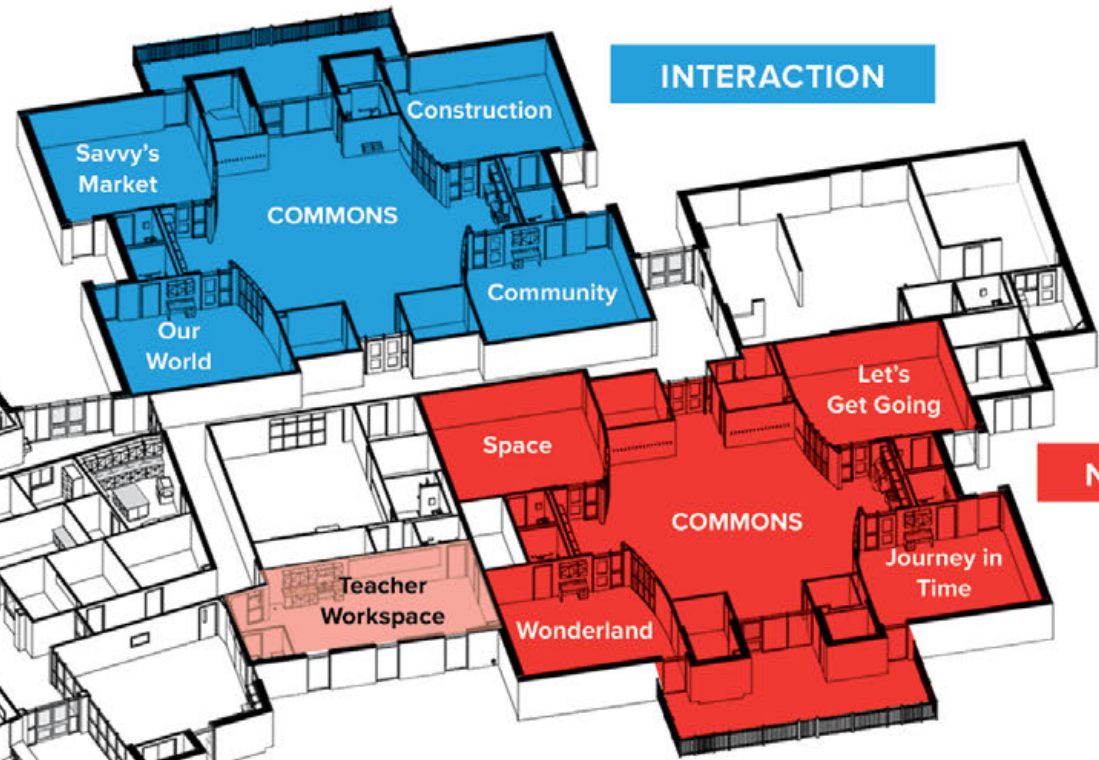
## INVESTIGATION



Activity Room +  
Tornado Shelter

FRONT  
ENTRY

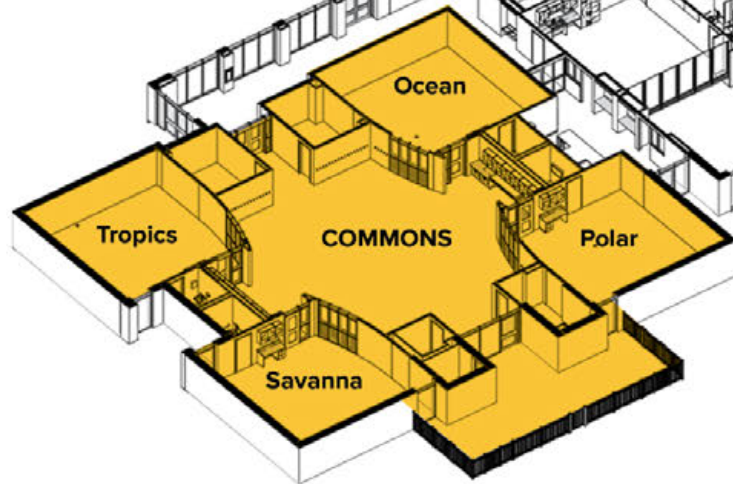
## INTERACTION



## NAVIGATION

Teacher  
Workspace

## EXPLORATION



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# 360 TOUR

## *You will see:*

- Rich language experiences
- Positive interactions
- Active, explorative experiences
- Multi-sensory approach
- Numeracy experiences
- Literacy-rich classroom



[Jump to Tour](#)



# QUESTIONS?

 **MISD** + **Huckabee**